



LanTraffic V2

Version 2.4

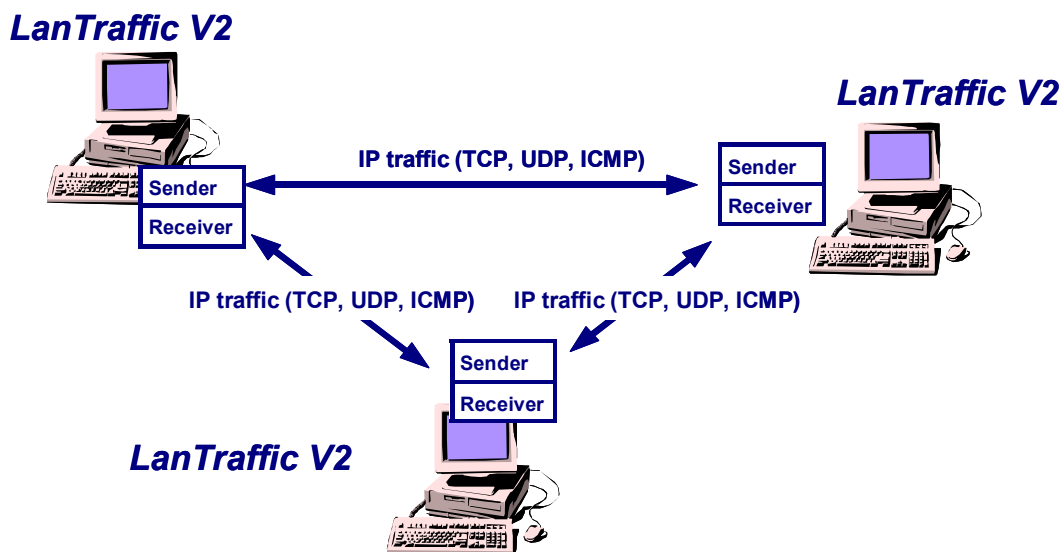
**Traffic Generator for IP Networks (IPv4 & IPv6)
LAN, MAN, WAN, WLAN, WWAN, Mobile, Satellite, PLC, etc.**

Product Overview

The **LanTraffic V2** software generates traffic for IP networks by using the following protocols: TCP (Transmission Control Protocol), UDP (User Datagram Protocol) or ICMP (Internet Control Message Protocol).

The add-on software called **Automation Tool for LanTraffic V2** allows automating operations with **LanTraffic V2**. For instance, you can run test campaigns automatically.

Various testing configurations can be implemented using more than two PCs. **LanTraffic V2** creates TCP or UDP connections between PCs through the IP network.



Product Requirements

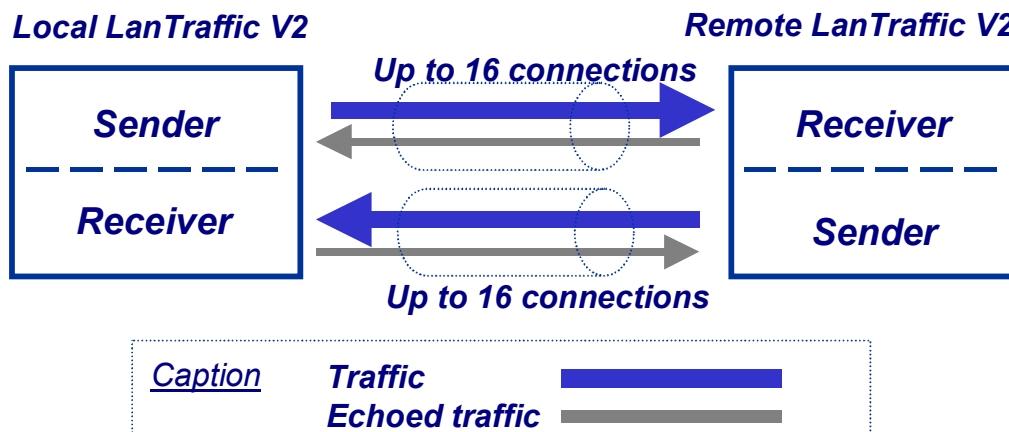
- Pentium PC running Windows 98 (SE recommended), Me, NT4 (SP6), 2000 or XP, and at least 128 MB Ram.
- 15 MB free hard disk space.
- Acrobat Reader is needed to display the help.
- 1024 x 768 display and DPI setting = Normal size (96 DPI).
- One Network Interface Card (LAN, WLAN, etc.)



Note: Windows XP and later is required to use IPv6.

Products features

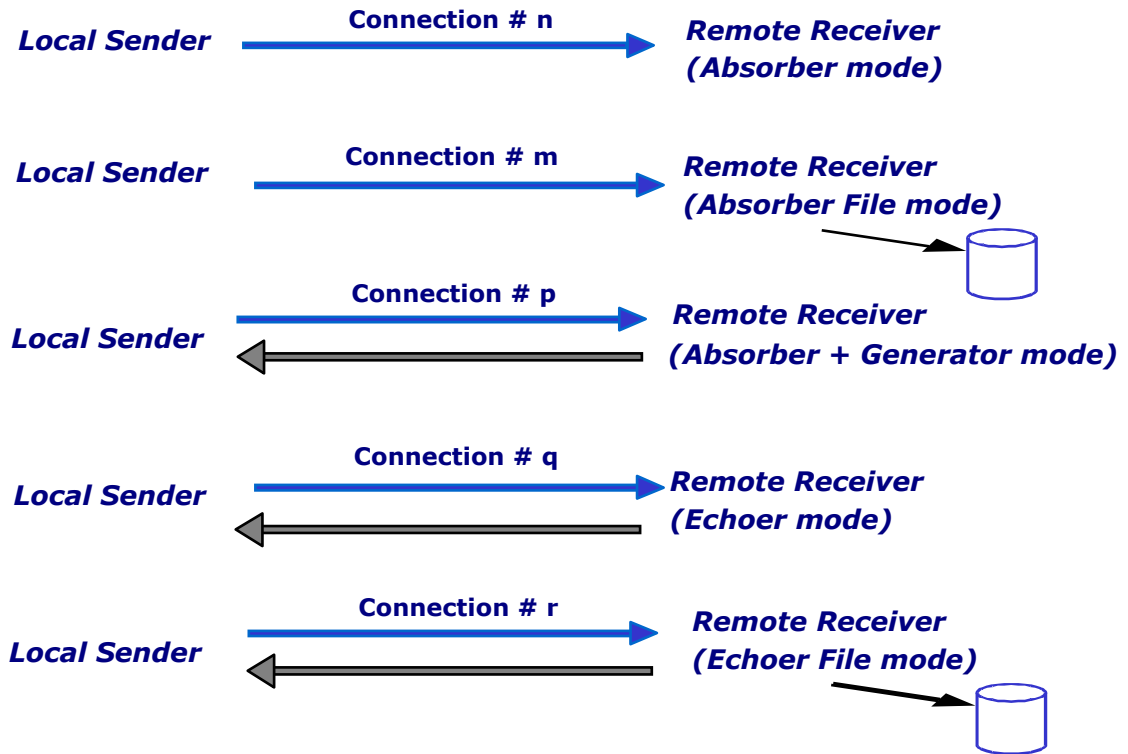
The **LanTraffic V2** testing tool is made of a **Sender** part and a **Receiver** part.



- The **Sender** generates up to 16 simultaneous UDP and/or TCP connections. Connections can be established in two different testing modes:
 - ⇒ **Unitary Mode:** you can select the traffic generator data source and configure packets size and inter packet delay for each connection.
- LanTraffic V2** offers three different data sources:
- Automatic data generator by using mathematical laws,
 - Packets generator: many parameters can be defined (number of packets to send, inter packet delay, packet contents, ...)
 - File: selection of a file to send.
- ⇒ **Automatic Mode:** select one mathematical law for connections generating (up to 16 connections) and starting time, and then select a second mathematical law for data volume to be sent.
 - ⇒ **Statistics:** for each connection the following statistics parameters are displayed by the **Sender** and can be saved in a file:
 - Sent throughput
 - Received throughput

- Sent packet throughput
 - Received packet throughput
 - Sent data volume
 - Received data volume (volume of data sent by the remote)
 - Sent packets
 - Received packets (packets sent by the remote)
 - Data volume to send
 - Remaining volume (of data to send)
 - Sequence numbering errors
 - RTT Mean (Round Trip Time)
 - Jitter
- The **Sender** can also generate up to 16 simultaneous ICMP connections, but through the unitary testing mode only:
- ⇒ **Unitary mode:** for each IP connection, you can select the traffic generator data source, specify the ToS byte (Type of Service) and the Time To Live (TTL).
- Find below the different possibilities available with the ICMP protocol:
- ICMP Echo request packet number and content: packet generator (fixed, randomized, alternated and increasing / decreasing).
 - ICMP Echo Request data size: fixed, randomized, alternated and increasing / decreasing.
 - ICMP Echo Reply receiving timeout: fixed, randomized, alternated, increasing / decreasing or use of a mathematical law.
- ⇒ **Statistics:** for each connection the following statistics parameters are displayed by the **Sender** and can be saved in a file:
- Sent ICMP requests (Tx Packets)
 - Received ICMP replies (Rx Packets, responses sent by the target remote)
 - Sequence numbering errors
 - RTT Mean (Round Trip Time)

- The **Receiver** receives traffic (up to 16 simultaneous connections) and operates five different working modes: Absorber, Absorber File, Absorber + Generator, Echoer and Echoer File.
- ⇒ Each Receiver connection can be set up according to one of the following five modes:



Note: we consider that the local machine is used for sending traffic and the remote one is used for receiving traffic.

- ⇒ **Statistics:** for each connection the following statistics parameters are displayed by the **Receiver** part and can be saved in a file:
 - Sent throughput
 - Received throughput
 - Sent packet throughput
 - Received packet throughput
 - Sent data volume
 - Received data volume (volume of data sent by the remote)
 - Sent packets
 - Received packets (packets sent by the remote)
 - Data volume to send
 - Remaining volume (of data to send)
 - Sequence numbering errors
 - Data not echoed
 - Jitter

::: Unicast & Multicast feature

LanTraffic V2 is able to generate and receive Unicast and Multicast IP traffic (IPv4 and IPv6). The multicast feature is used for the UDP protocol only.

::: IP version selection (Windows XP and later)

LanTraffic V2 supports IPv6 for Windows XP and later versions (i.e. 2003 Server) but doesn't support IPv6 for Windows 2000.

***LanTraffic V2** supports the IPv6 numerical address format (128 bits long) as well as canonical addresses. The IPv6 multicast is available with **LanTraffic V2** in accordance to RFC 2373 where a multicast IPv6 address starts with FF.*

With IPv6 the maximum size of the TCP packet is **1440** bytes whereas it is **1460** bytes with IPv4.

::: Interface selection

The interface selection of a LAN card (NIC), a virtual NIC such as an IP tunneling protocol or a remote access is useful to control the data traffic hardware route.

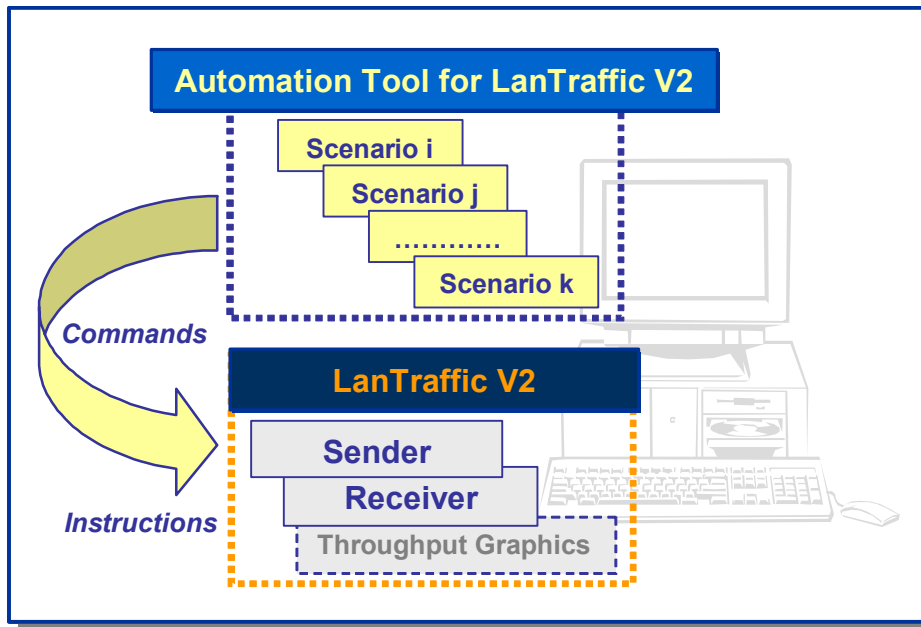
LanTraffic V2 is able to generate and receive Unicast and Multicast IP traffic on a selected interface, giving the user a deeper control where data are exchanged and makes multiple routes definition easier.

::: Statistics values

Statistics values presented by **LanTraffic V2** are calculated at the Application level. They don't include the protocol header, the IP header nor data link header and/or trailer.

The Automation Tool for LanTraffic V2

The add-on software **Automation Tool for LanTraffic V2** allows you to edit scenarios, carry out scenarios, set the **LanTraffic V2** parameters and pilot **LanTraffic V2** automatically on the same PC.



A scenario is a succession of **commands** and **instructions**.

A **command** is used to set parameters and/or activate a function of **LanTraffic V2**.

For example the *Set and Start connection(s)* command helps to set parameters for IP connections and to start the traffic on these connections. With such command you specify the IP address, port number, protocol, packet size, inter packet delay, duration, etc. and you start the traffic generation for these connections.

An **instruction** is used by the Automation Tool to create an internal process. For example, the *Wait Date/Time* instruction suspends the scenario execution up to the specified date and time before to continue.

By using the **Automation Tool for LanTraffic V2** you can:

- Set automatically the parameters of the **LanTraffic V2** software,
- Start and stop IP connections based on timers,
- Execute the scheduled operations in accordance with your own timing ,
- Make repetitive tests operations automatically,
- Simplify the tests reproduction,
- And more...

Customer references

Present on the market since 1997, **LanTraffic V2** is used in more than 40 countries.

See some worldwide references of satisfied customers:

ABN Amro, Alcatel, Aramco, Ascom, Avaya, Bloomberg, Cisco, Easynet, EDS, Ericsson, Equant, France Telecom, Intracom, Iwatsu, Kingston, Lucent, Motorola, Mutsumi, Netscout, Nokia, Nortel Networks, Novartis, NTT, Philips, Pinnacle, Qantas, QBE, Schlumberger, Siemens, Telefonica de Espana, Telefonica del Sur, Thales, Tiscali, Tropos Networks, Unisys, UnumProvident, US Army, USDoJ, US Navy, Vipersat, etc. as well as many universities and telecom institutes.

Conditions of use

LanTraffic V2 is licensed on a per workstation basis. You will need to purchase a separate license for each machine that you install it on.

Each licensed copy of the software installed on a workstation has a unique Site Code that requires the corresponding unique Site Key to be entered before being operational.

Delivery

Includes CD with documentation, printed installation guide, technical support and software maintenance (including major and minor software upgrades) for a period of twelve months from the date of purchase.

To download an evaluation of **LanTraffic V2** please visit us at:
<http://www.omnicor.com/netest.htm>